

## 7# lunga SH

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **36**
- SRM **4.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **12.5 %/h**
- Boil size **31.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (83.3%)  | 80 %  | 4   |
| Grain | Pszeniczny          | 0.5 kg (8.3%) | 85 %  | 3   |
| Grain | Strzegom Karmel 30  | 0.5 kg (8.3%) | 80 %  | 40  |

### Hops

| Use for             | Name  | Amount | Time     | Alpha acid |
|---------------------|-------|--------|----------|------------|
| Boil                | lunga | 15 g   | 60 min   | 10 %       |
| Boil                | lunga | 20 g   | 30 min   | 10 %       |
| Aroma (end of boil) | lunga | 25 g   | 10 min   | 10 %       |
| Whirlpool           | lunga | 20 g   | 0 min    | 10 %       |
| Dry Hop             | lunga | 50 g   | 7 day(s) | 10 %       |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | Mech Irlandzki | 5 g    | Boil    | 10 min |